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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/596,635	06/19/2000	BRUCE E. ALDRIDGE	K35A0574	3777

26890 7590 02/26/2004

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EXAMINER

BRODA, SAMUEL

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/596,635

Applicant(s)

ALDRIDGE ET AL.

Examiner

Samuel Broda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☒ Claim(s) 1-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Claims 1-24 have been examined.

Drawings

2. Applicants' formal drawings have been reviewed and approved by the PTO Draftsperson.

Claim Objections

3. The following is a partial quotation of 37 CFR § 1.75:

(a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

...

(c) . . . Claims in dependent form shall be construed to include all the limitations of the claim incorporated by reference into the dependent claim. . . .

...

(d)(1) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.

3.1 Claims 3, 6, 15, and 18 are objected to under 37 CFR § 1.75(d)(1) because claims 3 and 15 contain the term "equal ith point" and claims 6 and 18 contain the term "equal ith data element." Correction is required. For the purposes of claim examination, the term "equal ith point" was considered synonymous to "equal to the ith point" and the term "equal ith data element" was considered synonymous to "equal to the ith data element."

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3.2 Claim 5 is objected to under 37 CFR § 1.75(d)(1) because it contains the term “performing a the following steps.” Correction is required. For the purposes of claim examination, this term was considered synonymous to “performing the following steps.”

3.3 Claims 1-24 are objected to under 37 CFR § 1.75(c) and § 1.75(d)(1) because these claims include inconsistent step identifications.

For example, claim 1 includes steps labeled (a) through (h) whereas claim 3 is dependent on claim 1 and includes steps (a) and (b). It is unclear if steps (a) and (b) of claim 3 are related to steps (a) and (b) of claim 1. Correction is required. A more clear re-labeling of the steps in claim 3 might be “(g)(1)” and “(g)(2).” A similar set of re-labeling would appear to clarify the steps listed in claims 5 and 6.

Independent claim 13 appears to be the method claim corresponding to independent claim 1 but claim 13 includes no labeling of its steps. However, dependent claims 15 and 17-18 include labeling of steps that appears inconsistent with claim 13. Correction is required.

Claim Rejections - 35 U.S.C. § 101

4. The following is a quotation of 35 U.S.C. 101:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4.1 Method claims 13-24 are rejected for reciting a process comprising an abstract idea.

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4.2 Regarding claim 13, this claim is directed to “a method for creating an aggregated data model,” and the steps recited in claim 13 describe the abstract idea of calculating a set of bins and corresponding data models for each bin using a polynomial formula.

These steps do not:

- (1) recite data gathering limitations or post-mathematical operations that might independently limit the claims beyond the performance of a mathematical operation; or
- (2) limit the use of the output to a practical application providing a useful, concrete, and tangible result, such as making an estimate of stroke time using the combined distribution.

4.3 Claims 14-24 are dependent on claim 13 and rejected using the same analysis.

Indication of Allowable Subject Matter

5. Subject to objections listed above, and based on the prior art located to date and made of record, claims 1-12 do not appear to be taught or rendered obvious, and are indicated as allowable subject matter.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure. Reference to Leung et al, U.S. Patent 6,397,166 issued 28 May 2002 and filed 6

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November 1998, is cited as teaching a method for grouping multiple data points via model fitting.

Reference to Fayyad et al, U.S. Patent 6,263,337 issued 17 July 2001 and filed 22 May 1998, is cited as teaching a data mining system where a number of clusters are determined for a set of models to be explored.


Reference to Wilkinson, "Dot Plots," American Statistician, Vol. 53 No. 3, pp. 276-281 (August 1999), is cited as teaching the relations between dot plots and histogram estimation.

Reference to Laidlaw et al, "Classification of Material Mixtures in Volume Data for Visualization and Modeling," Technical Report CS-TR-94-07, California Institute of Technology (1994)(paper available at <http://citeseer.nj.nec.com/laidlaw94classification.html>), is cited as teaching histogram generation for a dataset containing a combination of materials. See Section 3 "Normalized Histograms" at pages 3-5 and the Appendices at pages 8-10.

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samuel Broda, whose telephone number is (703) 305-1026. The Examiner can normally be reached on Mondays through Fridays from 8:00 AM – 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kevin Teska, can be reached at (703) 305-9704. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist, whose telephone number is (703) 305-3900.


SAMUEL BRODA, ESQ.
PRIMARY EXAMINER